APPLICANTS: Guy L. Reed SERIAL NUMBER: 10/715,981

## LIST OF CLAIMS

- 1. (Original) A microplasmin polypeptide comprising a heterologous loop domain sequence, wherein said polypeptide is resistant to  $\infty$ -antiplasmin inhibition compared to a wild type microplasmin.
- 2. (Original)The polypeptide of claim 1, wherien said heterologous loop domain comprises at least 4 consecutive amino acids of a factor D loop domain.
- 3. (Original)The polypeptide of claim 1, wherein said heterologous loop domain comprises at least 10 consecutive amino acids of a factor D loop domain.
- 4. (Original) The polypeptide of claim 1, wherein said polypeptide comprises a heterologous loop domain sequence in microplasmin loop 3.
- 5. (Original) The polypeptide of claim 1, wherein said polypeptide comprises amino acid sequence LNGA (SEQ ID NO:1) in microplasmin loop 3.
- 6. (Original) The polypeptide of claim 1, wherein said polypeptide comprises a heterologous loop domain sequence in microplasmin loop 5.
- 7. (Original) The polypeptide of claim 1, wherein said polypeptide comprises amino acid sequence AHCLEDAADGKV (SEQ ID NO:2) in microplasmin loop 5.
- 8. (Original) The polypeptide of claim 1, wherein said polypeptide comprises a heterologous loop domain sequence in microplasmin loop 6.
- 9. (Original) The polypeptide of claim 1, wherein said polypeptide comprises amino acid sequence AHSLSQPEPSK (SEQ ID NO:3) in microplasmin loop 6.

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- 10. (Original) The polypeptide of claim 1, wherein said polypeptide comprises a heterologous loop domain sequence in microplasmin loop 7.
- 11. (Original) The polypeptide of claim 1, wherein said polypeptide comprises amino acid sequence HPDSQPDTIDHD (SEQ ID NO:4) in microplasmin loop 7.
- 12. (Withdrawn) A method of dissolving a blood clot, comprising contacting said blood clot with the polypeptide of claim 1.
- 13. (Withdrawn) A substantially pure fragment of plasminogen, wherein said fragment is activated at least 10% more efficiently compared to human glu-plasminogen.
- 14. (Withdrawn) The fragment of claim 13, wherein said fragment comprises at least 150 consecutive residues of SEQ ID NO:17.
- 15. (Withdrawn) The fragment of claim 13, wherein said fragment comprises a methionine residue at the N-terminal end.
- 16. (Withdrawn) A substantially pure polypeptide comprising residues 550-810 of SEQ ID NO:17, wherein residue 555 is not a cysteine residue.
- 17. (Withdrawn) A substantially pure polypeptide comprising residues 550-810 of SEQ ID NO:17, wherein residue 560 is not a cysteine residue.
- 18. (Withdrawn) A substantially pure polypeptide comprising residues 550-810 of SEQ ID NO:17, wherein residue 580 is not an arginine residue.
- 19. (Withdrawn) A substantially pure polypeptide comprising residues 481-810 of SEQ ID NO:17, wherein residue 555 is not a cysteine residue or wherein residue 560 is not a cysteine residue.

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20. (Withdrawn) A substantially pure polypeptide comprising residues 481-810 of SEQ ID NO:17, wherein residue 580 is not an arginine residue.